

Trajectory Browser Website

The Trajectory Browser is a web-based tool developed at the NASA Ames Research Center to be used for the preliminary assessment of trajectories to small-bodies and planets and for providing relevant launch date, time-of-flight and ΔV requirements.

The site hosts a database of transfer trajectories from Earth to asteroids and planets for various types of missions such as rendezvous, sample return or flybys. A search engine allows the user to find trajectories meeting desired constraints on the launch window, mission duration and ΔV capability, while a trajectory viewer tool allows the visualization of the heliocentric trajectory and the detailed mission itinerary.

The anticipated user base of this tool consists primarily of scientists and engineers designing interplanetary missions in the context of pre-phase A studies, particularly for performing accessibility surveys to large populations of small-bodies. The educational potential of the website is also recognized for academia and the public with regards to trajectory design, a field that has generally been poorly understood by the public.

The website is currently hosted on NASA-internal URL <http://trajbrowser.arc.nasa.gov/> with plans for a public release as soon as development is complete.

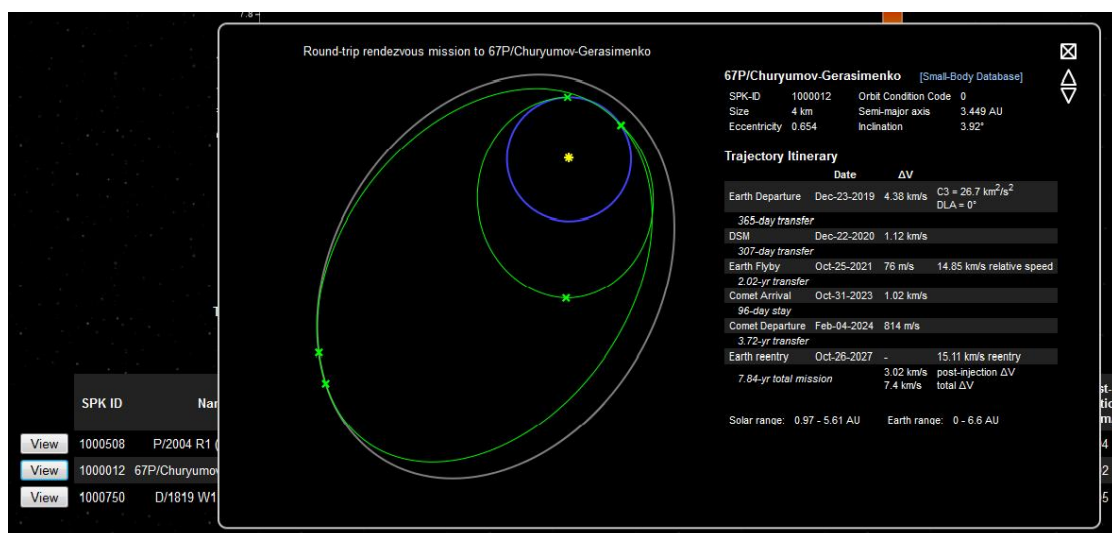


Figure 1. Screenshot of Trajectory Browser website